

tion was given as Indiana appears to have come from Kentucky. Tryon learned that Mr. Anthony's published localities and those of his labels did not always agree, and probably that was why he felt warranted in remarking that one of the Anthony species that was said to be from Alabama was more likely from North Carolina. But this time Anthony was right. The shell was Alabaman. Since Anthony had been in the banking business, which at least has a legend for accuracy, his mistakes may seem the harder to understand. But it must be recalled that the man was in ill health. There is a pathetic note on one of the Anthony labels, now in the Museum of Comparative Zoology: "New species det. while I was blind, by touch alone." It would be pleasant to record that this sense of touch was accurate. Unfortunately, it was not.

Two gentlemen of eastern Georgia were responsible for errors of the kind made by Anthony. Lea received from James Postell of St. Simon's Island mollusks the locality for which was given as Etowah River, one of the two big rivers forming the Coosa. Lea made four species of the lots. Three species were of the Florida "phase" which is quite distinct from that of the Coosa. The fourth seems to have come from Flint River of western Georgia, or one of its tributaries. The Flint fauna, too, is unlike the fauna of the Coosa. James Hamilton Cooper, a friend of Postell's and near enough to him to be called a neighbor, turned the Postell error the other way about. He sent Conrad six melanians as from the Savannah River. They were, in fact, from the upper Coosa River drainage.

TWO NEW HELICOIDS FROM LOS ANGELES COUNTY, CALIFORNIA

BY WENDELL O. GREGG

During the past several months an effort has been made to locate all the non-marine mollusca which have been reported from Los Angeles County, California. This search has

brought to light quite a number of forms which had not been previously reported from this locality. In a number of instances the known ranges have thus been extended many hundreds of miles. Among the unusual finds are the two helicoids which I am describing in the following paragraphs.

HELMINTHOGLYPTA TRASKI PACOIMENSIS, new subspecies.

Pl. 4, figs. 5, 6, 7.

Description: Shell helicoid, spire moderately elevated, whorls $5\frac{1}{2}$, convex, slowly increasing, last whorl descending behind the thickened peristome. Base rounded, umbilicus small, permeable to the apex and half covered by the reflected inner lip. Aperture subcircular, oblique; outer lip very slightly expanded, inner lip broadly expanded at the base. Color light golden brown, paler on the base, the shoulder marked with a band of liver brown, bordered above and below by a somewhat narrower band which is lighter in color than the body of the shell. Periostracum somewhat glossy, irregular incremental lines are strongly marked on all whorls; entire surface of shell finely wrinkly-granulose with a strong coarse overlying papillation. This papillation is widely spaced on the body whorl. On the preceding whorls it is more closely spaced and in unworn specimens each papilla bears a minute stubby hairlike periostracal process. The papillation on the younger whorls is noticeably arranged in both oblique and spiral series. The spiral sculpturing which consists of incised spiral lines is moderately developed on the penultimate whorl and is strongly marked over the entire body whorl.

Measurements: The type specimen measures as follows: Maximum diameter, 20 mm.; minimum diameter, 16.3 mm.; altitude, 13.5 mm.; umbilicus, 1.7 mm. Paratype, max. diam., 20 mm.; min. diam., 16.4 mm.; altitude, 13.5 mm.; umbilicus, 1.7 mm.

Type: No. 1033 Collection of Los Angeles Museum. Paratypes in collection of writer. The type with about 14 specimens (mostly immature) were taken in Pacoima Canyon, San Gabriel Mts., Los Angeles County, Calif., about one-

half mile below prison camp, on Feb. 21, 1931. They were found mostly under bark and fragments of rotten logs.

Remarks: The only other described form of *H. traski* which bears papilla over the body whorl is *H. traski isidroensis* Bartsch. This form may be distinguished from *isidroensis* by its more strongly incised spiral lines over the body whorl and by the presence of coarse papillae distinctly spaced over the entire under surface as well as upper surface of the body whorl.

HELMINTHOGLYPTA FONTIPHILA, new species. Pl. 4, figs. 8, 9, 10.

Description: Shell small, thin, helicoid, moderately flattened, whorls 5, convex, last whorl descending slightly behind the peristome. Base rounded, umbilicus rather large, patulous, about one-seventh the greater diameter of the shell. Aperture subcircular; peristome thin and not expanded. Color, dark olive-buff, marked on the shoulder of the whorl by a narrow chestnut-brown band which is bordered on either side by a somewhat narrower band, lighter in color than the body of the shell.

First two and a half or three whorls finely granulose while the entire remainder of the shell is covered by numerous fine papillae overlying a finely wrinkly-granulose groundwork. These papillae generally appear to be arranged in oblique series and on unworn specimens each papilla bears a minute hairlike periostracal process giving the shell a finely hirsute appearance.

Measurements: The type specimen measures as follows: Maximum diameter, 15.7 mm.; minimum diameter, 13.5 mm.; altitude, 8.7 mm.; umbilicus, 2.3 mm. Measurements of largest paratype: Maximum diameter, 16.7 mm.; minimum diameter, 14 mm.; altitude, 8.8 mm.; umbilicus, 2.5 mm.

Type: No. 1032 Collection of Los Angeles Museum. Paratypes in collections of writer, E. P. Chace, G. W. Willett and S. S. Berry.

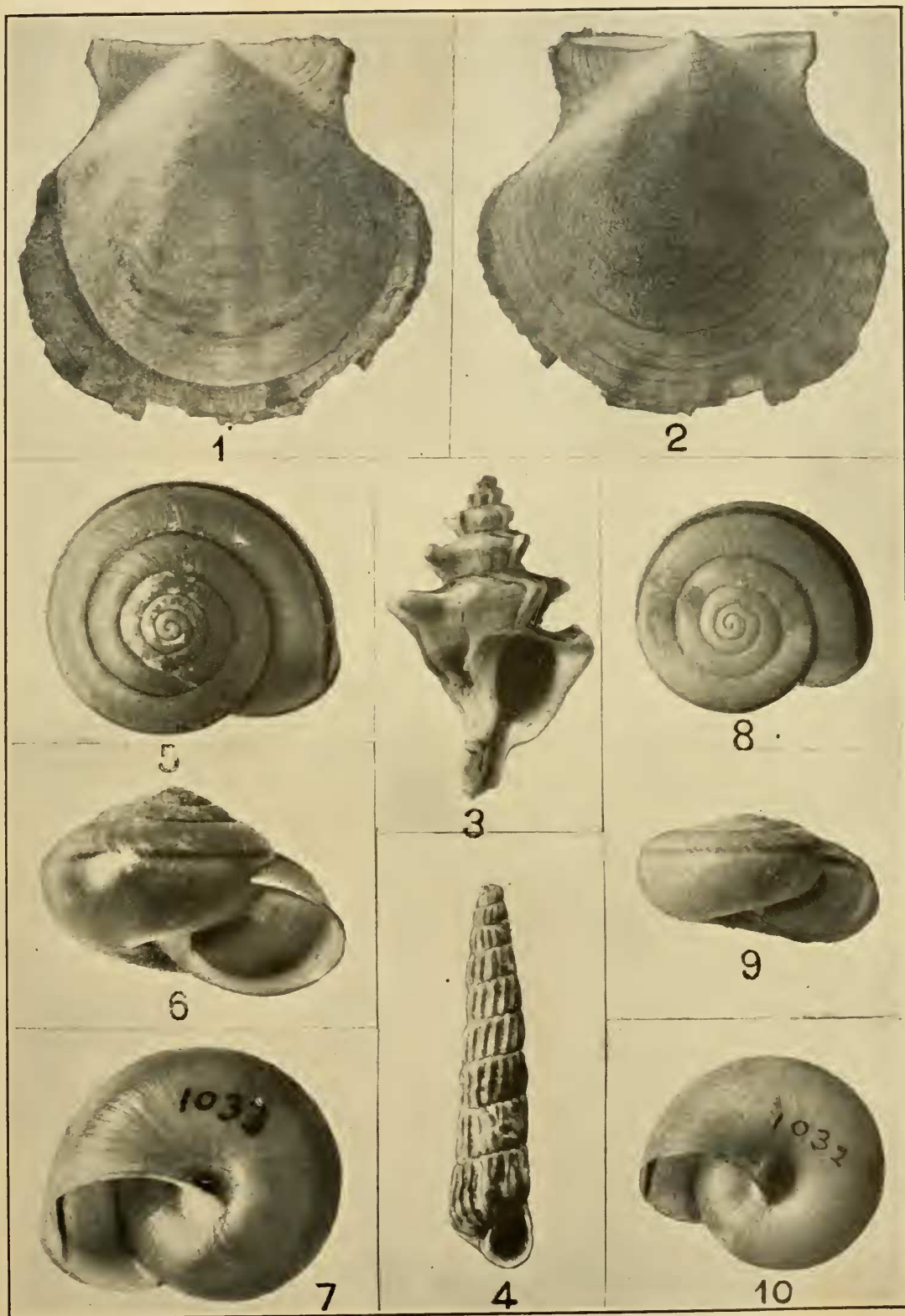
Type Locality: This odd race of *Helminthoglypta* was first

discovered on March 26, 1931, in a rather restricted area around a spring, west side of road, about one-half mile below dam, Little Rock Creek Canyon, north side of San Gabriel Mts., Los Angeles County, Calif. On May 10, 1931, the writer revisited the locality with Mr. and Mrs. E. P. Chace, at which time about 50 additional specimens were taken. Much of the material however consisted of dead or immature specimens. At this time a number of specimens were taken directly across the canyon below a leaking flume under leaves and rocks which were constantly moistened with cold water.

Additional Localities: Quite a number of specimens have been taken at various localities in Soledad Canyon, Los Angeles County, ranging from 5.5 to 8.5 miles from the Mint Canyon Highway (Solemint Service Station). This area might be roughly termed as the western half of the canyon proper. They were found in each locality near the Soledad Canyon Road, under rotten logs and in piles of brush. Each locality was but a few feet from the Santa Clara Creek.

This shell bears a close relationship to the Mohavean group of *Helminthoglypta*. It is the first of that general group to be taken within the limits of Los Angeles County. It is the only one of that group which apparently is found only near streams or springs. It may be distinguished from *H. mohaveana* by the following differences: It is smaller, thinner, flatter, more highly colored and the papillae are finer and bear hairlike processes. It may be distinguished from *H. cuyamacensis venturensis* Bartsch by its much thinner shell, smaller size, more flattened form, thin inner lip which is not expanded, larger and more open umbilicus which is not covered in any portion by the inner lip. The paratype of *venturensis* which I have before me is considerably lighter in color but that characteristic may be due to fading.

The figures accompanying this description are from photographs made at the Los Angeles Museum. I am indebted to Dr. Alex. Wetmore, Asst. Secretary of the U. S. National Museum, for the loan of the paratype of *H. cuyam-*



1, 2, *Pecten catalinensis* Willett. 3, *Trochon albospinosus* Willett. 4, *Turbonilla strungi* Willett. 5-7, *Helminthoglypta traski pacificensis* Gregg. 8-10, *Helminthoglypta fontiphila* Gregg.